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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,303	09/11/2003	Nobumasa Suzuki	P24195	3578
7055	7590	01/25/2006	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			DOE, GRACE SC	
			ART UNIT	PAPER NUMBER
			3732	
DATE MAILED: 01/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/659,303

Applicant(s)

SUZUKI ET AL.

Examiner

Grace SC Doe

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01/09/06.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scharf (US 6,682,563). Scharf teaches a rhombic plate (See Figures 3 and 5) symmetrical about a point in which a first diagonal connects opposing acute angles and a second diagonal connects opposing obtuse angles (See Figures 3 and 5). At least one hole is provided on the first diagonal or second diagonal line (See Figures 3 and 5; Col. 5 lines 10-18). Although Scharf discloses at least one spike provided on and extending from the main body, V-shaped in cross section, it does not expressly disclose

the location of the spikes as being along the diagonal lines (See Figures 1, 2 and 3; Col. 4, lines 54-67; Col. 5, lines 1-7). At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to relocate Scharf's spikes along the diagonal lines because Applicant failed to specify that locating the spikes on the diagonal lines provides an advantage, is used for a particular purpose, or solves a stated problem. In fact, Applicant noted in his specification that the "spikes 7 may be arranged on the line M, or may be slightly displaced from the line M [or N] within an allowable range." One of ordinary skill in the art at the time of the invention, furthermore, would have expected Applicant's invention to perform equally well with spikes located towards the center of the vertebrae plate, near the diagonal lines, because it performs the same function of stabilizing the plate relative to the vertebrae. Therefore, it would have been an obvious matter of design choice to modify Scharf to obtain the invention as specified in claims 1 and 2. The spike is V-shaped when taking a cross section perpendicular to the direction of penetration of at least one spike (See figure 1; col. 4, line 57).

### ***Response to Arguments***

15. Applicant's arguments filed on 1/9/06 have been fully considered but they are not persuasive. With respect to Applicant's arguments regarding the location of at least one spike on the first and second diagonal line of the main body. The body of the device includes the plate (See 30) and adjoining spacer (See 20). Therefore the spikes are considered to be provided on and extend from the body. With respect to Applicant's


argument objecting to Examiner's rejection based on obvious matter of choice in design to locate the spikes on the first and second diagonal line, Applicant has failed to specify the importance of locating the spikes on the diagonal line. Similarly, Applicant's quotation of page 7, lines 10-14 also fail to specify a reason for locating the spikes on the diagonal line as opposed to another location on the body. With respect to Applicant's argument that Scharf fails to disclose a V-shaped in cross section, the reference clearly states otherwise. The spike ends, 25, are specifically disclosed as being V-shaped (e.g. triangular) in cross-section (See col. 4, lines 54-59).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grace SC Doe whose telephone number is (571) 272-2831. The examiner can normally be reached on 8:00am - 6:30pm.

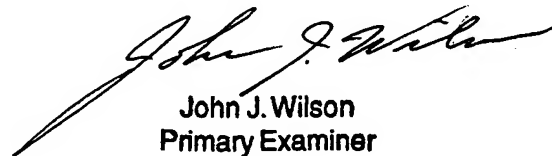
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Grace SC Doe  
Examiner  
Art Unit 3732  
(571) 272-2831



John J. Wilson  
Primary Examiner